Fairbury Earthquake History

By: Dale C. Maley
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Most Fairbury citizens do not think they live in an earthquake-prone area compared to California. However, Fairbury has experienced seven earthquakes with a magnitude greater than 5.0 on the Richter scale. The Fairbury area experienced the most tremendous earthquake in the history of the continental United States, with an 8.0 reading in 1811.

The earth is comprised of large earthen plates that float on a sea of underground molten magma. Occasionally, two of these plates collide and cause a sudden and violent shaking of the ground. If these movements in the earth's crust are large enough, they can cause extensive damage to man-made structures.

The San Andreas fault in California is a well-known place where two different earthen plates meet, resulting in many earthquakes. The New Madrid Fault in Missouri, also called the New Madrid seismic zone, is a series of faults, or fractures, at a weak spot in the earth's crust called the Reelfoot Rift. It lies deep in the ground and cannot be seen from the surface. The fault line runs roughly 150 miles from Arkansas into Missouri and Illinois.

In the Fall of 1811, the most severe earthquake ever recorded in the continental U.S. occurred in the New Madrid Fault. Three earthquakes occurred in the Fall of 1811 and Spring of 1812, and they all registered over 8.0 on the Richter scale. The earth shook so hard that it rang the church bells in Boston and temporarily reversed the course of the Mississippi River.

Valentine Darnall was the first pioneer settler in the Fairbury area in 1830. When the massive earthquakes occurred in 1811 and 1812, the only people who experienced them in the Fairbury area were the Kickapoo tribe of Native Americans.

The next major earthquake in the Fairbury area occurred on June 9, 1838, and it registered 5.2 on the Richter scale. At that time, less than 50 pioneer settlers lived in this area. Neither the Pantagraph nor Blade newspapers were yet in existence. Other newspapers noted the trembling of the earth was felt in St. Louis, Vandalia, and Terre Haute, Indiana.

After 1838, the next major earthquake was felt in Fairbury 53 years later, in 1891. It measured 5.2 on the Richter scale. Many citizens were awakened from their sleep when the first significant tremble rocked their beds around 11 p.m. There were many reports of windows, blinds, and doors rattling. In many cases, the man of the household grabbed his gun and started to search his home for burglars. No significant building damage was reported.

Just four years later, in 1895, a slightly larger earthquake with a magnitude of 5.9 on the Richter scale was felt in Fairbury. Since most citizens had experienced the 1891 earthquake, not as many citizens were baffled by the 1895 quake. Citizens were again woken from their sleep, and the plates rattled on their shelves as the earth rocked. No structural damage was reported.

Modern geologists theorize that Central Illinois is protected from the extensive motion of the earth because the crushed rock from the glaciers under our soil dampens the earthquake motions. Some areas around Pontiac sit on solid limestone, which would experience more rocking motion than others.

In 1909, another earthquake with a magnitude of 5.4 occurred. The Pantagraph published a short article about it and reported no significant damage. The Blade did not have an earthquake story.

The next earthquake in 1917 had a similar magnitude of 5.1 on the Richter scale. As in 1909, the Pantagraph had a small earthquake article, and the Blade published no story.

The Pantagraph had a more extensive article about the 5.3 magnitude earthquake in 1968. The Pantagraph reported no significant damage, and the Blade had no story.

Just four years later, in 1972, this area experienced a 4.0 earthquake. The Pantagraph noted that many Illinois Wesleyan students had never experienced an earthquake before. These students flooded the police department with phone calls.

In 1987, a 5.0-magnitude quake was felt in the Bloomington, Fairbury, and Peoria areas. One Fairbury citizen was attending a class at ICC Junior College in East Peoria when the earthquake occurred. This citizen's chair felt like it had been kicked, and the hanging projector screen started swaying for a minute or so. No significant structural damage was reported.

In 2004, an earthquake with a magnitude of 4.2 did not originate at the New Madrid Fault line. Instead, it originated about 30 miles north of Streator. Blade reporter Sharon Shifflet was awakened by her windows rattling and her bed rocking.

The last earthquake with a magnitude above 5.0 on the Richter scale occurred in 2008, measuring 5.2 on the Richter scale. The Pantagraph published an extensive story about earthquake history in central Illinois. No significant damage was reported.

Unfortunately, scientists can still not predict when and where future earthquakes will occur. Since 8.0-magnitude earthquakes occurred in the New Madrid Fault Zone in 1811 and 1812, it is possible we could see another 8.0-magnitude quake in the future generated from that fault line. In 1985, an 8.0 earthquake leveled all the buildings in Mexico City. Most of the buildings and homes in Fairbury would likely experience significant damage if we ever have another 8.0-magnitude earthquake.

Powerful earthquakes can damage buildings and houses.